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# An Internet Study of Cybersex Participants

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Cybersex is a subcategory of online sexual activities (OSA) and is defined as when two or more people are engaging in sexual talk while online for the purposes of sexual pleasure and may or may not include masturbation. Cybersex is a growing phenomenon with a significant impact on participants but very little research has been done on this subject to date. This study is the first to attempt to delineate characteristics of those who engage in cybersex. Data were collected through an online questionnaire in Swedish, administered through the Swedish web portal Passagen.se. Out of the total sample (N=1828), almost a third, both men and women, reported to have engaged in cybersex. A logistic regression analysis showed that age, sex, and sexual orientation were important demographic variables to consider when investigating cybersex. A comparison of interval data showed those engaging in cybersex to have a higher likelihood of spending more time online for OSA and having more offline sex partners than those not engaging in cybersex.

KEY WORDS: cybersex; sexuality; internet; online sexual activities.

## INTRODUCTION

Many people are using the Internet for online sexual activities (OSA) and the numbers seem to grow as the Internet continues to expand throughout the world. Cooper and Griffin-Shelley (2002) characterized OSA as the next sexual revolution. The triple-A-engine (access, affordability, and anonymity) was found to be a useful model to explain the power and attraction of OSA (Cooper, 1998; Cooper & Griffin-Shelley, 2002). Some OSA are more visually oriented (e.g., adult pictures and movies) while others are more interactive and/or communicative (e.g., online dating, chatting, discussion forums). Also, a distinction can be made among educational, recreational, and social/community types of OSA.

In 2002, a large scale quantitative study was conducted on online sexuality in Sweden (Månsson et al., 2003). This study was unique because the sample consisted of an almost equal sex distribution, which allows for a fuller understanding of OSA. In earlier similar studies, the samples have consisted of approximately 85% men and 15% women (Cooper, Morahan-Martin, Mathy, & Maheu, 2002; Cooper, Scherer, Boies, & Gordon, 1999).

Although both women and men are represented in all categories mentioned above, it has been found that women tend to be more interested in interactive OSA while men are more interested in visually oriented OSA (Cooper, Månsson, Daneback, Tikkanen, & Ross, 2003). In addition to sex, age is another variable that has proven to be important in analyses of OSA. For example, people between 18 and 24 years have a different usage pattern when compared with those over 25 years, and the difference is most apparent when compared with people ranging from 50 to 65 years. For younger people, the use of the Internet is more complex and multifaceted, particularly where OSA is concerned (Cooper et al., 2003; Månsson, Daneback, Tikkanen, & Löfgren-Mårtenson, 2003). While some reports have discussed sex differences in OSA, research up to this date has primarily focused on men and little is still known about women's usage of the Internet for OSA.

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The current study, which was based on the Swedish sample, focuses on a subgroup of OSA users, both men and women, engaging in "cybersex."

Since Turkle's (1995) observations of sexual interactions in so-called multiuser domains, researchers have defined cybersex differently. At times, cybersex has been used as an equivalent to general OSA. Cooper and Griffin-Shelley (2002) defined cybersex as a subcategory of OSA where the Internet is used for sexually gratifying activities. These activities range from looking at pictures to erotic chat sessions, sometimes including masturbation. The definition of cybersex that was used in the present study was slightly more narrow and focused exclusively on the interactive part of having online sex. This has earlier been referred to as "cybering," as it was believed that this was what most respondents would understand the term to mean (Cooper & Griffin-Shelley, 2002). Thus, for the purposes of this study, cybersex involved two or more people engaging in simulated sex talk while online for the purposes of sexual pleasure and may or may not include masturbation by one or more of the participants.

Mostly, cybersex is a real-time event involving two persons who are typing each other messages using a chat client like ICQ or Microsoft Messenger. In other cases, a couple may find or create themselves a chat room in cyberspace where this interaction takes place. Some even exchange pictures or short movies of themselves or erotic pictures and movies found on the web to accompany the otherwise text based communication (Cooper & Griffin-Shelley, 2002; Månsson et al., 2003). Typically, persons who engage in cybersex find each other on the Internet and have never met before in real life (IRL). The conversations vary and range from flirting and "talking dirty" to giving very detailed descriptions of having intercourse. This way of having "virtual" sex enables people to explore their own sexuality, to try new things they have not yet tried offline, or in other cases have no intention of trying offline. It could be sharing secret sexual fantasies or creating an interactive sex novel.

The medium also allows the user to play different roles and even pretend to be of the other sex and of a different age. Cybersex can be used as a compliment to an already existing sexual relationship, a safe way of experimenting with sexuality, or as an alternative for sexually disenfranchised groups (Leiblum, 2001; Leiblum & Döring, 2002; Tepper & Owens, 2002). Cybersex can either be a goal in itself or serve as a first step toward an IRL encounter (Barak & Fisher, 2002; Månsson et al., 2003).

There can also be a serious downside to cybersex. Engaging in this kind of OSA can be very time consuming. For some people, life on the screen can become a substitute for their offline life activities, ultimately leading to isolation and to neglect work and other duties (Turkle, 1995). Using the Internet for cybersex when already in a relationship may affect one's partner, both sexually and emotionally. Some view cybersex as infidelity, just as much if it would happen offline, and this may affect a whole family (Schneider, 2000, 2002; Whitty, 2003). In some cases, an online affair may lead to an offline affair, not only potentially damaging for families or relationships, but also increasing the risk of sexually transmitted infections (STI). Furthermore, the Internet cannot verify age and minors can easily become involved in inappropriate sexual situations (Freeman-Longo, 2000).

Clinicians are reporting a rapid increase in the numbers of patients with issues relating to OSA (Cooper & Griffin-Shelley, 2002). An understanding of cybersex and its users is important for those working with sexual and relationship issues, as cybersex can be either part of a problematic behavior or of a strategy to enhance one's sexuality and it is within the purview of clinicians to guide it away from the former and towards the latter. Understanding cybersex is also important for sexuality research in general because it is a new sexual phenomenon where it is possible to become aroused with another person without any auditory, visual, or physical contact.

The present study, which is a more in-depth analysis of survey data collected by Månsson et al. (2003), aims to expand the existing knowledge of cybersex by examining a number of basic demographic characteristics (sex, age, relationship status, and sexual orientation) of those who participate in cybersex. A second aim of the study was to investigate how cybersex participants' sexualities are manifested offline and online by measuring sexual activity (the number of sex partners that respondents have had in the last year) and time spent online for OSA.

## **METHOD**

## **Participants**

As a result of the ethical and legal complications of involving minors in a survey related to sexuality, it was decided to restrict participation to adults (≥18 years). If a respondent filled out the questionnaire and claimed to be under the age of 18, that case was removed from the database. An upper age limit was set at 65 years, due to the small numbers claiming to be older. With those limitations, 1835 respondents (931 women, 904 men) completed the questionnaire.

Of these, 1458 respondents (658 women, 800 men) claimed to use the Internet for OSA. The mean age

for OSA users was 29.7 years (SD = 10.3) for women and 31.5 years (SD = 9.8) for men (t = 3.27, df = 1456, p < .001). The sex distribution among OSA users were 55% men and 45% women ( $\chi^2 = 88.01$ , df = 1, p < .001) which are the same percentages as found in the overall use of the Internet in Sweden, and identical to the percentages of those who visited the portal site where the questionnaire was launched (54% men and 46% women).

#### Procedure

The questionnaire was launched through a Swedish portal site called Passagen (www.passagen.se). A banner was placed on the website for 2 weeks from June 10 to June 23, 2002 and appeared randomly on the portal as well as on its sub-sites. There was no way to control where the banner would appear and it was not possible to predict for whom the banner would show; thus, for all practical purposes, its appearance was truly random according to the Passagen administrators. During the 2 weeks, Passagen.se had 818,422 unique visitors the first week and 893,599 unique visitors the second week, and the total number of visits was approximately 2 million with approximately 14 million pages viewed.

### Measures

The questionnaire was based on two earlier measures. The first was used in an earlier study carried out in conjunction with one of the largest American portals (Cooper, Scherer, & Mathy, 2001) and the second was used in a population based sexuality study in Sweden (Lewin, Fugl-Meyer, Helmius, Lalos, & Månsson, 1998). The online questionnaire consisted of 93 questions, shown on 75 web pages, and broken down into seven sections. Each respondent was assigned a unique identity based on a combination of their Internet protocol number and a specific number assigned to the questionnaire (see Cooper et al., 2003 and Månsson et al., 2003 for a more detailed description of the questionnaire and the technique used for data gathering).<sup>5</sup> In the present study, four sociodemographic measures (sex, age, relationship status, and sexual orientation) and two measures related to online and offline sexuality (time spent on OSA and number of sex partners last 12 months) were analyzed. Age was divided into four groups, 18-24, 25-34, 35-49, and 50-65. This division was based on an earlier study of sexuality in Sweden and was chosen for comparative reasons (Lewin et al., 1998). Relationship status was created from the original marital status question in the questionnaire. Those respondents who reported to be either married, cohabiting, living in a registered partnership, or being in a relationship but living apart (e.g., in the beginning of a relationship or between people who are dating, but not living together) were coded as being in a relationship. Those reporting being either single, divorced, or widowed were coded as not being in a relationship. The variable sexual orientation, which was based on self identification, consisted of heterosexuals, homosexuals, and bisexuals.

The time spent on OSA was divided into six groups. These groups were less than 1 hr/week, 1–3, 3–6, 6–10, 10–15, and more than 15 hr/week. The rationale for using this division was to minimize the possible effect of outliers and/or the possible effect of an uneven distribution. For the same reasons, the number of sex partners in the last 12 months was divided into seven groups (0, 1, 2–3, 4–6, 7–9, 10–19, and more than 20). The question on the number of sex partners was placed in the context of offline demographics in the questionnaire and did not include eventual cybersex partners.

### RESULTS

Table I shows the percentage of respondents answering whether or not they had had cybersex. A total of 30% of the men and 34% of the women reported to have had such an experience; However, the sex difference was not significant ( $\chi^2 = 2.72, df = 1, ns$ ). When broken down by sex and age, the percentages changed somewhat. Table I shows that, for men, experience decreased with age from 38% in the youngest group to 13% in the oldest group. For women, there was a slight increase from the youngest group and then a noticeable decrease in the oldest group. There were no significant sex differences in any of the age groups (18–24,  $\chi^2 = 0.78$ , df = 1, ns; 25–34,  $\chi^2 = 1.10$ , df = 1, ns; 50–65,  $\chi^2 = 1.48$ , df = 1, ns), with the exception of those between 35 and 49 years old. Here, significantly more women than men had had cybersex  $(35-49, \chi^2 = 5.32, df = 1, p < .05)$ . Between age groups, the youngest group had most cybersex experience while the oldest group was the least experienced.

Table II shows that most cybersex interactions take place in chat rooms (72%) followed by ICQ/Microsoft Messenger (52%). Respondents had the choice to mark multiple alternatives and thus the total percentages exceeded 100. There were no significant sex differences with regard to the choice of media used for cybersex (e-mail,  $\chi^2 = 1.53$ , df = 1, ns; chat room,  $\chi^2 = 0.71$ ,

<sup>&</sup>lt;sup>5</sup>The complete questionnaire can be obtained from the first author.

	18–24 years		25–34 years		35–49 years*		50–65 years	
Experience of cybersex	Men $(n = 215)$	Women $(n = 275)$	Men $(n = 338)$	Women $(n = 201)$	Men $(n = 193)$	Women $(n = 137)$	Men $(n = 54)$	Women $(n = 45)$
Yes	38	34	30	35	25	37	13	22
No	62	66	70	65	75	63	87	78

Table I. OSA-Users Experience of Cybersex by Age and Sex (%)

df = 1, ns; ICQ/Messenger,  $\chi^2 = 0.49$ , df = 1, ns; Other,  $\chi^2 = 1.82$ , df = 1, ns). Respondents who claimed to use other media referred to other programs used for real time chatting (e.g., mIRC).

Table III summarizes the outcome of the multivariate analysis. Columns display the odds ratio (OR) for men and women, respectively. Starting with age groups, men had odds ratios below 1.00 in all groups, suggesting they were less likely to have had cybersex compared with the youngest group (18–24), but the odds ratio was significant only for the oldest group. Except for the oldest group (50–65), age had no effect on odds ratios for women. Regardless of sex, being in a committed relationship did not have a significant effect on whether or not the respondents had had cybersex.

Homosexual men were over four times more likely to have had cybersex compared with heterosexual men. For bisexual men, the odds ratio showed that they were almost two times more likely to have engaged in cybersex compared with heterosexual men, but this was not significant at the .05 level. Sexual orientation was found not to have any significant effects on odds ratios for women.

The last two variables in the multivariate analysis examined aspects of the respondents' offline and online sexuality. Looking at offline behavior first, using the number of sex partners during the last year as an indicator of offline sexual activity, the regression model suggested that having had more than one sex partner increased the possibility of having had cybersex. However, it is important to recognize the non-linear relationship

Table II. Media Used for Cybersex (%)

	Percent by sex					
Medium	Men $(n = 222)$	Women $(n = 215)$				
E-mail	19	14				
Chatroom	73	72				
CQ/Messenger	54	51				
Other	9	6				
Other	9					

*Note*. Multiple answers were possible and thus the total percentages exceeds 100 for both sexes.

between the number of partners and cybersex. Note that the odds ratio for women were both higher and had a stronger significance when looking at the 4–6 and 7–9 groups, suggesting that women who have cybersex were three to four times more likely to have had 4–6 and 7–9 sex partners in the last year, respectively. Men with cybersex experience were likely to have had 2–3 sex partners in the last year. The mean number of sex partners for men

**Table III.** Effects on Odds of Having Experience of Cybersex by Sex (N = 1458)

	Men $(n = 800)$			Women ( $n = 658$ )			
	OR	p	N	OR	р	N	
Age							
18–24 (ref.)	1		215	1		275	
25-34	0.82	ns	338	0.83	ns	201	
35-49	0.66	ns	193	1.03	ns	137	
50-65	0.13	.002	54	0.59	ns	45	
In a committed relation							
Yes	0.95	ns	373	1.39	ns	305	
No (ref.)	1		424	1		350	
Sexual orientation							
Heterosexual (ref.)	1		726	1		557	
Homosexual	4.28	.004	22	0.70	ns	8	
Bisexual	1.86	ns	44	1.58	ns	72	
Number of sex partners							
last 12 months							
0	0.72	ns	149	1.03	ns	80	
1 (ref.)	1		324	1		259	
2–3	1.72	.024	168	1.56	ns	156	
46	1.71	ns	81	2.78	.001	76	
7–9	2.11	ns	17	3.99	.008	21	
10-19	1.45	ns	11	2.54	ns	8	
20<	1.84	ns	7	1.77	ns	3	
Time online for OSA							
(hr/week)							
<1 (ref.)	1		175	1		166	
1–3	1.29	ns	144	0.96	ns	89	
3-6	1.30	.008	195	1.20	.049	141	
6–10	4.11	.001	201	1.91	.022	145	
10-15	2.86	.010	45	7.80	.001	35	
15<	1.41	.001	36	1.33	.001	23	

*Note*. Where responses total <1458, the remainder are missing responses.

p < .05

with cybersex experience was 5.42 (SD = 31.20) and for women 2.8 (SD = 3.24), but the sex difference was not statistically significant (t = 1.19, df = 435, ns).

The last variable examined in the regression model was the amount of time cybersex respondents spent involved in any kind of OSA. The odds ratio indicated that being in any of the groups spending more than 3 hr on OSA per week had a significant effect on participation in cybersex. Again, it is important to note the non-linear relationship between the time online for OSA and cybersex. Men who spend 6–10 hr online per week were four times more likely to have had cybersex and women who spend 10–15 hr online were almost eight times more likely to have had cybersex. The mean number of hours spent online for OSA per week among those who engaged in cybersex were 8.08 (SD = 9.89) for men and 6.37 (SD = 6.45) for women. The sex difference was significant (t = 2.14, df = 441, p < .05).

When comparing the number of offline sex partners and time spent online for OSA for those having had cybersex with those without this experience, there were significant differences found between the groups as shown in Table IV. Men with cybersex experience had had more than twice as many offline sex partners as men without this experience. The difference was significant (t = -2.41, df = 755, p < .05). Similar tendencies were found among women where those with cybersex experience had had significantly more sex partners the last year compared with the non-cybersex group (t = -2.80, df = 603, p < .01).

The cybersex group and the non-cybersex group were also significantly different considering the time spent online for OSA. Men in the cybersex group were found to spend twice as much time online for OSA compared with the other group (t = -7.79, df = 764, p < .001). Women in the cybersex group spent less time online for OSA than men, but spent almost twice as much time online as those women not engaging in cybersex (t = -5.31, df = 597, p < .001).

There were also differences between the cybersex group and the non-cybersex group regarding the amount of time they spent online for general purposes. Men in the cybersex group (n=233) spent 23.32 hr (SD=16.78) online per week and women (n=214) spent 19.50 hr (SD=11.93) online per week. There was a significant sex difference in the cybersex group (t=2.76, df=445, p<.05). No sex differences were found among those not engaging in cybersex (t<1, df=445, ns), where men spent 15.57 hr (SD=14.37) online and women 14.69 hr (SD=14.21) online per week for general purposes.

### **DISCUSSION**

The aim of this study was to investigate the characteristics of those who participate in cybersex. Cybersex was defined as when two or more people engaged in simulated sex talk while online for the purposes of sexual pleasure. We found that both men and women participate in cybersex to a similar extent. An interesting observation, when broken down by age, was that women between 35 and 49 years had significantly more experience of cybersex compared with men in the same group. Respondents of both sexes in the oldest age group (50-65) seemed to have little interest in cybersex. This is likely to be related to unfamiliarity with computers and the Internet (particularly as it might be utilized for sexual purposes). We also know that older women are primarily focused on partner seeking activities and may not view cybersex as such an activity (Cooper et al., 2003; Månsson et al., 2003).

According to the percentages displayed in Table I, men's interest in cybersex seemed to decrease with age while women's interest stayed almost the same, even undergoing a slight increase with age when focusing on the three age groups between 18 and 49 years.

**Table IV.** Comparison Between Cybersex Group and Non-Cybersex Group on Mean Number of Sex Partners and Time Spent Online for OSA

	Cybersex group		Non-cybersex group						
	M	SD	n	М	SD	n	1	df	р
Number of sex partners									
Men	5.42	31.20	227	2.02	5.91	530	-2.41	755	.016
Women	2.84	3.24	210	1.99	3.72	395	-2.80	603	.005
Hours per week spent									
online for OSA									
Men	8.08	9.89	231	4.03	4.52	535	-7.79	764	.001
Women	6.37	6.45	212	3.73	5.44	387	-5.31	597	.001

However, a multivariate regression analysis for each sex did not confirm this pattern, but suggested age to be an unimportant variable for women's participation in cybersex. We know that interaction with others and "education" around sexual matters are women's primary reasons for engaging in OSA and, thus, making cybersex an interesting activity for women of all ages (Cooper et al., 2003). Cybersex may be an activity in which women feel most comfortable expressing their sexuality, freed of their concerns and restrictions of the attitudes of the larger views of society (Leiblum & Döring, 2002). The triple-A-engine allows them to engage in a range of sexual activities without fear of violence, STI, pregnancy, societal censure or social stigmatization. In this regard we must also point out that engagement in cybersex may serve cyberromantic purposes as well. For men, the analysis showed that those between 50 and 65 were less likely to have had cybersex compared with men between 18 and 24. The trajectory for men can be explained by the fact that younger men's overall involvement in all forms of OSA is very high as they experiment and explore their sexuality (Leitenberg & Henning, 1995; Månsson et al., 2003).

Sexual orientation was found to be another important variable to consider as a covariant for those most likely to engage in cybersex. Homosexual men were over four times more likely to have cybersex compared to heterosexual men. This was not a surprise as homosexual men pioneered social uses of the Internet and were among the first to search the corners of cyberspace for sex partners. In addition, these groups are more open to less traditional types of sexual activities. Therefore, cybersex is a more known and accepted type of sexual activity in these communities. In many places where openly seeking homosexual experiences could still have major adverse consequences, cyberspace might be the safest place for them to express their sexuality (Ross & Kauth, 2002). In the homosexual world where sexual activity often happens earlier and may be a factor in determining whether a fuller relation is worth pursuing (in contrast to the heterosexual world in which the inverse sequence is more typical) (Bailey, Gaulin, Agyei, & Gladue, 1994), cybersex may serve as a helpful "trial run" prior to deciding whether an IRL meeting is warranted. In addition, in today's world the Internet and cybersex are often intricately linked to the coming out process and serve as a semi-protected "virtual" practice ground, especially for younger people (Ross & Kauth, 2002).

One reason for heterosexual men's lesser engagement in cybersex, compared to homosexual men, might be their widespread concerns about the pervasiveness of "gender-bending" in sexual chat rooms (gender-bending

is where men pretend to be women and engage in cybersex with other men). The belief that this is a common occurrence continues, despite research finding it to be a fairly uncommon form of Internet deception (Cooper, Delmonico, & Burg, 2000).

We also found cybersex not to be primarily a "singles" activity. Rather, the regression analysis showed no significant effects between cybersex and relationship status. To some extent participants may have a more liberal view on this kind of activity and may not view cybersex as infidelity. However, as earlier research has shown, this view may not be shared by a spouse in a committed relationship (Schneider, 2000, 2002; Whitty, 2003). Additionally, some cybersex sessions may take place within a relationship as an extension of an already existing sexual repertoire.

Another important finding was that those who engage in cybersex were more likely to be sexually active offline having had a greater number of sex partners IRL during the past year compared with those without cybersex experience. A parsimonious explanation for this would be that those who have a higher level of sexual interest are more likely to both engage in cybersex and also to have more sexual partners IRL. Of course, some of their IRL partners may be people who they first met online and then, after engaging in cybersex, decided they wanted to meet offline.

While this may be true, an additional contributing factor might be that the triple A fosters an environment where sexuality is easy and both subtly and blatantly encouraged. With the Internet increasingly being used to visit contact/dating sites (Zernike, 2003), those who believe sexuality to be an important part of a good relationship might want to see if their sexual proclivities are compatible with that of a potential partner (as others might check religious or smoking preferences) and use cybersex as a means to assess that "fit" between them.

On the other hand, repeated exposure and experience, via cybersex, might also result in a deceptive sense of comfort in the new relation and decrease participants' perceived need to take adequate precautions when and if they met IRL. Rare, but increasingly more common, reports suggest that OSA is correlated with higher rates of STI, sexual assault, and even trolling by pedophiles (Benotsch, Kalichman, & Cage, 2002; Galbreath, Berlin, & Sawyer, 2002; Hospers, Harterink, van den Hoek, & Venstra, 2002; Månsson et al., 2003; McFarlane, Bull, & Reitmeijer, 2000). Additionally, previous research has pointed to greater amounts of time engaged in OSA as being a risk factor for online sexual problems of various sorts (Cooper et al., 1999), including disruption to ongoing IRL relationships.

In terms of time online, it is not surprising that those who engage in cybersex also spent relatively more time on OSA than the non-cybersex group. This is probably because cybersex primarily is a real time activity and, thus, more time consuming than most other forms of OSA (e.g., viewing adult websites, getting sexual information, purchasing sexual services and/or products). Additionally, cybersex participants were found not only to spend more time online for sexual activities, but also to spend more time online for general purposes compared with the noncybersex group.

From a sexual theoretical perspective, it will be a major challenge for researchers to try to understand and analyze if and how the sociosexual interaction taking place on the Internet through cybersex will influence the sexual scripts in society. Not only is it possible to be intimate with someone regardless of sex, age, and sexual orientation (and location), but also to explore sexual fantasies and to use a sexually explicit language. According to the sexual scripting theory, developed by Gagnon and Simon (1973), social actors are continually involved in shaping the materials of relevant cultural scenarios into scripts for sexual behavior in different contexts (see also Simon & Gagnon, 1999). These scripts are telling us when, with whom, in which situations, and by what it is acceptable to become sexually aroused. For example, there are scripts telling us not to have intercourse before a certain age. The ability to perceive these age adequate scripts is built into the multiple social roles that most people in our society have to play.

This study attempted to provide some empirical data on the characteristics of those who engage in cybersex. Clearly, the results are preliminary and need to be replicated and expanded upon. Particularly important is taking our initial forays the next step and further elucidating the ways that cybersex can be helpful, as well as harmful, for specific populations in various situations.

Although this study was based on Swedish data, it has proven to corroborate, in most respects, with earlier international research on general patterns of Internet sexuality and, therefore, strengthens our belief in its validity (Cooper et al., 2003). In addition, the fact that the sample consisted of an almost equal sex distribution made it possible to examine sex differences and, particularly, women's participation in cybersex.

We recognize that this study had a number of limitations. Despite numerous methodological procedures to maximize randomization, this was still not a truly randomized sample. Constructing a more traditional offline study more able to control those factors would greatly increase the ability to make generalizations to the larger population. Qualitative interviews with selected

participants following the collection of the data would also be an important means of generating more in-depth knowledge of cybersex, the content of these interactions, and the impact on participants' offline lives.

### REFERENCES

- Bailey, J. M., Gaulin, S., Agyei, Y., & Gladue, B. A. (1994). Effects of gender and sexual orientation on evolutionarily relevant aspects of human mating psychology. *Journal of Personality and Social Psychology*, 66, 1081–1093.
- Barak, A., & Fisher, W. A. (2002). The future of internet sexuality. In A. Cooper (Ed.), Sex and the internet: A guidebook for clinicians (pp. 263–280). New York: Brunner-Routledge.
- Benotsch, E. G., Kalichman, S., & Cage, M. (2002). Men who have met sex partners via the Internet: Prevalence, predictors, and implications for HIV prevention. Archives of Sexual Behavior, 31, 177–183
- Cooper, A. (1998). Sexuality and the internet: Surfing into the new millennium. CyberPsychology & Behavior, 1, 181– 187.
- Cooper, A., Delmonico, D. L., & Burg, R. (2000). Cybersex users, abusers, and compulsives: New findings and implications. Sexual Addiction & Compulsivity, 7, 5–29.
- Cooper, A., & Griffin-Shelley, E. (2002). Introduction. The internet: The next sexual revolution. In A. Cooper (Ed.), Sex and the internet: A guidebook for clinicians (pp. 1–15). New York: Brunner-Routledge.
- Cooper, A., Månsson, S.-A., Daneback, K., Tikkanen, R., & Ross, M. W. (2003). Internet sexuality in Scandinavia. Sexual and Relationship Therapy, 18, 277–291.
- Cooper, A., Morahan-Martin, J., Mathy, R. M., & Maheu, M. (2002). Toward an increased understanding of user demographics in online sexual activities. *Journal of Sex & Marital Therapy*, 28, 105– 129.
- Cooper, A., Scherer, C. R., Boies, S. C., & Gordon, B. L. (1999). Sexuality on the Internet: From sexual exploration to pathological expression. *Professional Psychology: Research and Practice*, 30, 154–164.
- Cooper, A., Scherer, C. R., & Mathy, R. M. (2001). Overcoming methodological concerns in the investigation of online sexual activities. *Cyberpsychology and Behavior*, 4, 437–448.
- Freeman-Longo, R. E. (2000). Children, teens, and sex on the internet. Sexual Addiction & Compulsivity, 7, 75–90.
- Gagnon, J. H., & Simon, W. (1973). Sexual conduct: The social sources of sexuality. Chicago: Aldine.
- Galbreath, N., Berlin, F., & Sawyer, D. (2002). Paraphilias and the internet. In A. Cooper (Ed.), Sex and the internet: A guidebook for clinicians (pp. 187–205). New York: Brunner-Routledge.
- Hospers, H. J., Harterink, P., van den Hoek, K., & Veenstra, J. (2002). Chatters on the internet: A special target group for HIV prevention. AIDS Care, 14, 539–544.
- Leiblum, S. R. (2001). Women, sex and the internet. Sexual and Relationship Therapy, 16, 389–405.
- Leiblum, S. R., & Döring, N. (2002). Internet sexuality: Known risks and fresh chances for women. In A. Cooper (Ed.), Sex and the internet: A guidebook for clinicians (pp. 19–45). New York: Brunner-Routledge.
- Leitenberg, H., & Henning, K. (1995). Sexual fantasy. *Psychological Bulletin*, 117, 469–496.
- Lewin, B., Fugl-Meyer, K., Helmius, G., Lalos, A., & Månsson, S. A. (1998). Sex in Sweden. Stockholm: Institute of Public Health.
- McFarlane, M., Bull, S., & Reitmeijer, C. A. (2000). The Internet as a newly emerging risk environment for sexually transmitted diseases. *Journal of the American Medical Association*, 284, 443– 446

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- Månsson, S.-A., Daneback, K., Tikkanen, R., & Löfgren-Mårtenson, L. (2003). Kärlek och sex på internet [Love and sex on the internet]. Göteborg University and Malmö University. Nätsexprojektet Rapport 2003:1.
- Ross, M. W., & Kauth, M. R. (2002). Men who have sex with men, and the internet: Emerging clinical issues and their management. In A. Cooper (Ed.), *Sex and the internet: A guidebook for clinicians* (pp. 47–69). New York: Brunner-Routledge.
- Schneider, J. P. (2000). Effects of cybersex addiction on the family: Results of a survey. Sexual Addiction & Compulsivity, 7, 31–58.
- Schneider, J. P. (2002). The new elephant in the living room: Effects of compulsive cybersex behaviors on the spouse. In A. Cooper (Ed.), Sex and the internet: A guidebook for clinicians (pp. 169–186). New York: Brunner-Routledge.
- Simon, W., & Gagnon, J. H. (1999). Sexual scripts. In R. Parker, & P. Aggleton (Eds.), Culture, society and sexuality; a reader (pp. 29– 38). London: UCL Press.
- Tepper, M. S., & Owens, A. (2002). Access to pleasure: Onramp to specific information on disability, illness, and other expected changes throughout the lifespan. In A. Cooper (Ed.), Sex and the internet: A guidebook for clinicians (pp. 71–86). New York: Brunner-Routledge.
- Turkle, S. (1995). Life on the screen. New York: Simon & Schuster.
- Whitty, M. T. (2003). Pushing the wrong buttons: Men's and women's attitudes toward online and offline infidelity. CyberPsychology & Behavior, 6, 569–579.
- Zernike, K. (2003, November 30). Just saying no to the dating industry. *New York Times*. Retrieved January 30, 2004, from http://www.nytimes.com.